

National Railway of Silvis  
LPC# 1610700009  
Rock Island County  
SF/Tech  
**CONFIDENTIAL**

# CERCLA Quickscore



Prepared by:  
Office of Site Evaluation  
Division of Remediation Management  
Bureau of Land

### **Site Summary and Recommendation**

Under the direction of U.S. EPA Region 5, the Illinois EPA performed a Site Reassessment with sampling of the National Railway site located at 300 9<sup>th</sup> Street, Silvis, IL Rock Island County. The site encompasses a diesel locomotive maintenance and repair facility, including a rail yard that is situated on approximately 83 acres of land. The facility was originally owned and operated by Rock Island Railroad beginning in 1905. After Rock Island Railroad went bankrupt in the early 1980's, the facility was purchased by Chrome Locomotive a division of the Varlen Corporation. Chrome Locomotive performed repair and maintenance of diesel locomotives and components until the facility was sold to National Railway Equipment Company in 1990, who is the current owner as of the date of this report.

National Railway purchased the property from Chrome Locomotive in 1990. IEPA agency files document that during the years of operation from 1903 to the present, hazardous waste generated by the facility included solvents and paint sludges. Sludges produced were reportedly taken by Roto-Rooter while other liquid waste was discharged into two oil lagoons located to the north of the facility on John Deere property. According to Mr. Hood of National Railway, who had also worked for the previous owners Silvis Shops and Chrome Locomotive, a pretreatment plant was put into operation in approximately 1967 which treated the wastewater before discharging into the lagoons. In approximately 1969, the facility was connected to the East Moline sewer system to collect facility wastewater which prevented wastewater from discharging into the lagoons. In 1981 the John Deere Company sampled the lagoons and found them to contain elevated levels of heavy metals.

National Railway of Silvis was placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) on July 20, 1992. The facility was placed on CERCLIS as a result of a request for discovery action initiated by the State of

Illinois. This action was taken because of past industrial operations and the possibility for the public wells of Silvis, located just north of the site, to be contaminated by the subject facility.

On October 29, 2009, National Railway Equipment reenrolled into the SRP by submitted a new DRM-1 form for reenrollment into the Voluntary Program. National Railway was involved in the SRP since their initial enrollment in 1991 but was removed due to lack of progress in the program. Upon enrollment into the program, NRE submitted a Phase One report on December 9, 2009 and identified 34 recognized environmental conditions. A Site Investigation report was submitted in July 2011.

Site Investigation activities included the collection of 54 soil samples at 46 locations and 11 monitoring wells (SCI 2011). All soil and groundwater samples were compared to Illinois EPA Tiered Approach to Corrective Action (TACO) tables. Soil samples were collected from 12-20 below ground surface (bgs) and sampled for VOCs, SVOCs, total metals and PCBs. The soil sample analysis detected elevated levels of metals, petroleum hydrocarbons, and chlorinated solvents. The groundwater samples detected elevated levels of petroleum hydrocarbons and chlorinated solvents. In addition to the soil and groundwater samples collected, SCI also conducted a Free Product Survey by installing temporary piezometers with 15-foot screens in locations that were known to have free product in the past. Subsequently, free product was observed in the piezometers. The conclusion of the Site Investigation concluded that soil and groundwater had been impacted by activities of past and present owners. A Remedial Action Plan was completed in February 2012. The Plan included the removal of free product from the site, eliminate the groundwater exposure route, and eliminate the construction worker exposure route. These objectives were obtained through institutional controls, preventive controls and remediation of free product. A focused NFR Letter was issued on November 2016 by the Illinois EPA. Institutional controls that were part of the NFR letter included a groundwater

ordinance for the Village of Silvis. Neighboring downgradient communities such as East Moline and Carbon Cliff have residences and business that obtain drinking water from private wells and groundwater flow is to the north northeast. During the Site Reassessment with sampling, a number of downgradient private drinking water wells were sampled to assess the potential groundwater contamination associated with the site. No groundwater samples were found to contain any contaminants of concern, and at this time, groundwater is not thought to be of concern.

The site did not score on the groundwater pathway due to not having any impacted wells encountered during the investigation. In the event that additional site related impacts are discovered in the future, the Office of Site Evaluation may investigate future site related issues. At this time, it would be the recommendation of the Illinois Office of Site Evaluation, that the site be NFRAP (No Further Remediation Action Planned).

**\*\*\*\* CONFIDENTIAL \*\*\*\***  
**\*\*\*\*PRE-DECISIONAL DOCUMENT \*\*\*\***  
**\*\*\*\* SUMMARY SCORESHEET \*\*\*\***  
**\*\*\*\* FOR COMPUTING PROJECTED HRS SCORE \*\*\*\***

**\*\*\*\* Do Not Cite or Quote \*\*\*\***

Site Name: National Railway of Silvis                      Region: Region 5  
 Scenario Name: Site  
 City, County, State:      Silvis/Rock Island,              Evaluator: Tony Wasilewski  
 Illinois  
 EPA ID#: ILD 984903203                                      Date: 09/09/2020  
 Lat/Long: 41° 30' 53", -90° 24' 53"  
 Congressional District: 17th  
 This Scoresheet is for: Other  
 Scenario Name: Site  
 Description:

	S pathway	S <sup>2</sup> pathway
Ground Water Migration Pathway Score (S <sub>gw</sub> )	0.0	0.0
Surface Water Migration Pathway Score (S <sub>sw</sub> )	0.0	0.0
Soil Exposure and Subsurface Intrusion Pathway Score (S <sub>sessi</sub> )	0.0	0.0
Air Migration Score (S <sub>a</sub> )	0.0	0.0
$S^2_{gw} + S^2_{sw} + S^2_s + S^2_a$		0.0
$(S^2_{gw} + S^2_{sw} + S^2_s + S^2_a)/4$		0.0
$/(S^2_{gw} + S^2_{sw} + S^2_{sessi} + S^2_a)/4$		0.0

Pathways not assigned a score (explain):

**TABLE 3-1 --GROUND WATER MIGRATION PATHWAY SCORESHEET**

Factor categories and factors	Maximum Value	Value Assigned
Aquifer Evaluated: groundwater		
<b>Likelihood of Release to an Aquifer:</b>		
1. Observed Release	550	0.0
2. Potential to Release:		
2a. Containment	10	0.0
2b. Net Precipitation	10	3.0
2c. Depth to Aquifer	5	1.0
2d. Travel Time	35	15.0
2e. Potential to Release [(lines 2a(2b + 2c + 2d)]	500	0.0
3. Likelihood of Release (higher of lines 1 and 2e)	550	0.0
<b>Waste Characteristics:</b>		
4. Toxicity/Mobility	(a)	100.0
5. Hazardous Waste Quantity	(a)	10.0
6. Waste Characteristics	100	6.0
<b>Targets:</b>		
7. Nearest Well	(b)	20.0
8. Population:		
8a. Level I Concentrations	(b)	0.0
8b. Level II Concentrations	(b)	0.0
8c. Potential Contamination	(b)	957.0
8d. Population (lines 8a + 8b + 8c)	(b)	957.0
9. Resources	5	5.0
10. Wellhead Protection Area	20	0.0
11. Targets (lines 7 + 8d + 9 + 10)	(b)	982.0
<b>Ground Water Migration Score for an Aquifer:</b>		
12. Aquifer Score [(lines 3 x 6 x 11)/82,5000] <sup>c</sup>	100	0.0
<b>Ground Water Migration Pathway Score:</b>		
13. Pathway Score ( $S_{gw}$ ), (highest value from line 12 for all aquifers evaluated) <sup>c</sup>	100	0.0

<sup>a</sup> Maximum value applies to waste characteristics category

<sup>b</sup> Maximum value not applicable

<sup>c</sup> Do not round to nearest integer

**TABLE 4-1 --SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET**

Factor categories and factors	Maximum Value	Value Assigned
Watershed Evaluated: Mississippi River		
<b>Drinking Water Threat</b>		
<b>Likelihood of Release:</b>		
1. Observed Release	550	550.0
2. Potential to Release by Overland Flow:		
2a. Containment	10	0.0
2b. Runoff	10	1.0
2c. Distance to Surface Water	5	6.0
2d. Potential to Release by Overland Flow [(lines 2a(2b + 2c)]	35	0.0
3.Potential to Release by Flood:		
3a. Containment (Flood)	10	0.0
3b. Flood Frequency	50	25.0
3c. Potential to Release by Flood (lines 3a x 3b)	500	250.0
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	250.0
5. Likelihood of Release (higher of lines 1 and 4)	550	550.0
<b>Waste Characteristics:</b>		
6. Toxicity/Persistence	(a)	10000.0
7. Hazardous Waste Quantity	(a)	10.0
8. Waste Characteristics	100	18.0
<b>Targets:</b>		
9. Nearest Intake	50	0.0
10. Population:		
10a. Level I Concentrations	(b)	0.0
10b. Level II Concentrations	(b)	0.0
10c. Potential Contamination	(b)	0.0
10d. Population (lines 10a + 10b + 10c)	(b)	0.0
11. Resources	5	0.0
12. Targets (lines 9 + 10d + 11)	(b)	0.0
<b>Drinking Water Threat Score:</b>		
13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100]	100	0.0
<b>Human Food Chain Threat</b>		
<b>Likelihood of Release:</b>		
14. Likelihood of Release (same value as line 5)	550	550.0
<b>Waste Characteristics:</b>		
15. Toxicity/Persistence/Bioaccumulation	(a)	0.0
16. Hazardous Waste Quantity	(a)	10.0
17. Waste Characteristics	1000	0.0
<b>Targets:</b>		
18. Food Chain Individual	50	0.0
19. Population		
19a. Level I Concentration	(b)	0.0
19b. Level II Concentration	(b)	0.0
19c. Potential Human Food Chain Contamination	(b)	0.0

19d. Population (lines 19a + 19b + 19c)	(b)	0.0	
20. Targets (lines 18 + 19d)	(b)		0.0
<b>Human Food Chain Threat Score:</b>			
21. Human Food Chain Threat Score [(lines 14x17x20)/82500, subject to max of 100]	100		0.0
<b>Environmental Threat</b>			
<b>Likelihood of Release:</b>			
22. Likelihood of Release (same value as line 5)	550		550.0
<b>Waste Characteristics:</b>			
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	0.0	
24. Hazardous Waste Quantity	(a)	10.0	
25. Waste Characteristics	1000		0.0
<b>Targets:</b>			
26. Sensitive Environments			
26a. Level I Concentrations	(b)	0.0	
26b. Level II Concentrations	(b)	0.0	
26c. Potential Contamination	(b)	0.0	
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	0.0	
27. Targets (value from line 26d)	(b)		0.0
<b>Environmental Threat Score:</b>			
28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60]	60		0.0
<b>Surface Water Overland/Flood Migration Component Score for a Watershed</b>			
29. Watershed Score <sup>C</sup> (lines 13+21+28, subject to a max of 100)	100		0.00
<b>Surface Water Overland/Flood Migration Component Score</b>			
30. Component Score (S <sub>SW</sub> ) <sup>C</sup> (highest score from line 29 for all watersheds evaluated)	100		0

<sup>a</sup> Maximum value applies to waste characteristics category

<sup>b</sup> Maximum value not applicable

<sup>c</sup> Do not round to nearest integer



**TABLE 4-25 --GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET**

Factor categories and factors	Maximum Value	Value Assigned
Watershed Evaluated: Mississippi River		
<b>Drinking Water Threat</b>		
<b>Likelihood of Release to an Aquifer:</b>		
1. Observed Release	550	0.0
2. Potential to Release:		
2a. Containment	10	0.0
2b. Net Precipitation	10	0.0
2c. Depth to Aquifer	5	0.0
2d. Travel Time	35	0.0
2e. Potential to Release [(lines 2a(2b + 2c + 2d)]	500	0.0
3. Likelihood of Release (higher of lines 1 and 2e)	550	0.0
<b>Waste Characteristics:</b>		
4. Toxicity/Mobility	(a)	0.0
5. Hazardous Waste Quantity	(a)	0.0
6. Waste Characteristics	100	0.0
<b>Targets:</b>		
7. Nearest Well	(b)	0.0
8. Population:		
8a. Level I Concentrations	(b)	0.0
8b. Level II Concentrations	(b)	0.0
8c. Potential Contamination	(b)	0.0
8d. Population (lines 8a + 8b + 8c)	(b)	0.0
9. Resources	5	0.0
10. Targets (lines 7 + 8d + 9)	(b)	0.0
<b>Drinking Water Threat Score:</b>		
11. Drinking Water Threat Score [(lines 3 x 6 x 10)/82,500, subject to max of 100]	100	0.0
<b>Human Food Chain Threat</b>		
<b>Likelihood of Release:</b>		
12. Likelihood of Release (same value as line 3)	550	0.0
<b>Waste Characteristics:</b>		
13. Toxicity/Mobility/Persistence/Bioaccumulation	(a)	0.0
14. Hazardous Waste Quantity	(a)	0.0
15. Waste Characteristics	1000	0.0
<b>Targets:</b>		
16. Food Chain Individual	50	0.0
17. Population		
17a. Level I Concentration	(b)	0.0
17b. Level II Concentration	(b)	0.0
17c. Potential Human Food Chain Contamination	(b)	0.0
17d. Population (lines 17a + 17b + 17c)	(b)	0.0
18. Targets (lines 16 + 17d)	(b)	0.0

**Human Food Chain Threat Score:**

19. Human Food Chain Threat Score [(lines 12x15x18)/82,500,subject to max of 100]	100	0.0
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**Environmental Threat****Likelihood of Release:**

20. Likelihood of Release (same value as line 3)	550	0.0
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**Waste Characteristics:**

21. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	0.0	
22. Hazardous Waste Quantity	(a)	0.0	
23. Waste Characteristics	1000		0.0

**Targets:**

24. Sensitive Environments			
24a. Level I Concentrations	(b)	0.0	
24b. Level II Concentrations	(b)	0.0	
24c. Potential Contamination	(b)	0.0	
24d. Sensitive Environments (lines 24a + 24b + 24c)	(b)	0.0	
25. Targets (value from line 24d)	(b)		0.0

**Environmental Threat Score:**

26. Environmental Threat Score [(lines 20x23x25)/82,500 subject to a max of 60]	60	0.0
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**Ground Water to Surface Water Migration Component Score for a Watershed**

27. Watershed Score <sup>C</sup> (lines 11 + 19 + 28, subject to a max of 100)	100	0.0
28. Component Score (S <sub>gs</sub> ) <sup>C</sup> (highest score from line 27 for all watersheds evaluated, subject to a max of 100)	100	0.0

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<sup>a</sup> Maximum value applies to waste characteristics category

<sup>b</sup> Maximum value not applicable

<sup>c</sup> Do not round to nearest integer

**TABLE 5-1 --SOIL EXPOSURE COMPONENT SCORESHEET**

Factor categories and factors	Maximum Value	Value Assigned
<b>Likelihood of Exposure:</b>		
1. Likelihood of Exposure	550	550.0
<b>Waste Characteristics:</b>		
2. Toxicity	(a)	0.0
3. Hazardous Waste Quantity	(a)	0.0
4. Waste Characteristics	100	0.0
<b>Targets:</b>		
5. Resident Individual	50	
6. Resident Population:		
6a. Level I Concentrations	(b)	0
6b. Level II Concentrations	(b)	0
6c. Population (lines 6a + 6b)	(b)	0
7. Workers	15	10.0
8. Resources	5	
9. Terrestrial Sensitive Environments	(c)	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)	10.0
<b>Resident Population Threat Score</b>		
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)	0.0
<b>Nearby Population Threat</b>		
<b>Likelihood of Exposure:</b>		
12. Attractiveness/Accessibility	100	5.0
13. Area of Contamination	100	20.0
14. Likelihood of Exposure	500	5.0
<b>Waste Characteristics:</b>		
15. Toxicity	(a)	0.0
16. Hazardous Waste Quantity	(a)	0.0
17. Waste Characteristics	100	0.0
<b>Targets:</b>		
18. Nearby Individual	1	1.0
19. Population Within 1 Mile	(b)	6.60
20. Targets (lines 18 + 19)	(b)	7.60
<b>Nearby Population Threat Score</b>		
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)	0.0
<b>Soil Exposure Component Score:</b>		
22. Pathway Score <sup>d</sup> ( $S_{SE}$ ), [lines (11+21)/82,500, subject to max of 100]	100	0.0

<sup>a</sup> Maximum value applies to waste characteristics category

<sup>b</sup> Maximum value not applicable

<sup>c</sup> No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

<sup>d</sup> Do not round to nearest integer

TABLE 5-11 --SUBSURFACE INTRUSION COMPONENT SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned
<b>Likelihood of Exposure:</b>		
1. Observed Exposure	550	0.0
2. Potential for Exposure		
2a. Structure Containment	10	1.0
2b. Depth to contamination	10	0.0
2c. Vertical Migration	15	1.0
2d. Vapor Migration Potential	25	0.0
3. Potential for Exposure (lines 2a * (2b+2c+2d), subject to a maximum of 500)	500	1.0
4. Likelihood of Exposure (higher of lines 1 or 3)	550	1.0
<b>Waste Characteristics:</b>		
5. Toxicity/Degradation	(a)	
6. Hazardous Waste Quantity	(a)	
7. Waste Characteristics (subject to a maximum of 100)	100	
<b>Targets:</b>		
8. Exposed Individual	50	
9. Population:		
9a. Level I Concentrations	(b)	0
9b. Level II Concentrations	(b)	0
9c. Population within an Area of Subsurface Contamination	(b)	0.0
9d. Total Population (lines 9a + 9b + 9c)	(b)	0
10. Resources	5	0.0
11. Targets (lines 8 + 9d + 10)	(b)	0
<b>Subsurface Intrusion Component Score:</b>		
12. Subsurface Intrusion Component (lines 4 x 7 x 11)/82,500 <sup>C</sup> (subject to a maximum of 100)	100	
<b>Soil Exposure and Subsurface Intrusion Pathway Score:</b>		
13. Soil Exposure Component + Subsurface Intrusion Component (subject to a maximum of 100)	100	
<sup>a</sup> Maximum value applies to waste characteristics category		
<sup>b</sup> Maximum value not applicable		
<sup>c</sup> No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60		

**TABLE 6-1 --AIR MIGRATION PATHWAY SCORESHEET**

Factor categories and factors	Maximum Value	Value Assigned
<b>Likelihood of Release:</b>		
1. Observed Release	550	
2. Potential to Release:		
2a. Gas Potential to Release	500	
2b. Particulate Potential to Release	500	
2c. Potential to Release (higher of lines 2a and 2b)	500	
3. Likelihood of Release (higher of lines 1 and 2c)	550	
<b>Waste Characteristics:</b>		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
<b>Targets:</b>		
7. Nearest Individual	50	
8. Population:		
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(c)	
8d. Population (lines 8a + 8b + 8c)	(b)	
9. Resources	5	
10. Sensitive Environments:		
10a. Actual Contamination	(c)	
10b. Potential Contamination	(c)	
10c. Sensitive Environments (lines 10a + 10b)	(c)	
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	
<b>Air Migration Pathway Score:</b>		
12. Pathway Score ( $S_a$ ) $[(\text{lines } 3 \times 6 \times 11)/82,500]^d$	100	

<sup>a</sup> Maximum value applies to waste characteristics category

<sup>b</sup> Maximum value not applicable

<sup>c</sup>No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.

<sup>d</sup> Do not round to nearest integer